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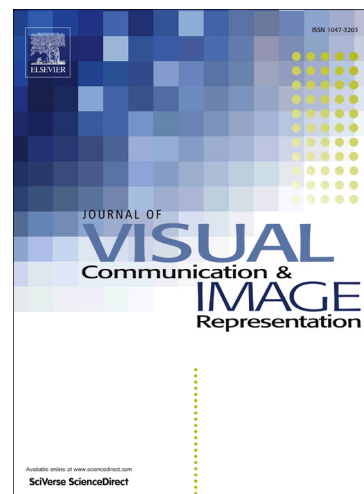
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A new method for inpainting of depth maps from time-of-flight sensors based on a modified closing by reconstruction algorithm

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Abstract

Time-of-Flight (ToF) sensors are popular devices that extract 3D information from a scene but result to be susceptible to noise and loss of data creating holes and gaps in the boundaries of the objects. The most common approaches to tackling this problem are supported by color images with good results, however, not all ToF devices produce color information. Mathematical morphology provides operators that can manage the problem of noise in single depth frames. In this paper, a new method for the filtering of single depth maps, when no color image is available, is presented, based on a modification to the morphological closing by reconstruction algorithm. The proposed method eliminates

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